

loosely in its mother cell, after them at both ends, so that the surfaces formed by the septum occur at the base of the retracted extremities of the sac.

This condition consequently shows that, though the two cells concerned in the construction of a septum may, as a rule, not be recognizable prior to its thickening, there is no cause to doubt the presence of those membranes, which is indeed justly deduced from other circumstances.

The stronger cohesion of the two cell-membranes at their extremities indicates a dissimilar chemical constitution in their different regions—a circumstance that also obtains among some cells of the complex tissues of more highly organized plants.

From all the foregoing facts it follows without doubt, that the folds of the joint-cells of *Conserva glomerata*, so far as they can be certainly recognized, have no connexion with the multiplication of cells by fission, and indeed exert no demonstrable direct influence upon cell-multiplication. On the contrary, it has been ascertained that, in *Cladophora*, in certain cases, the septa originate by the growth and mutual contact of the membranes of free endogenous cells; and upon this ground we may perhaps be justified in explaining, by analogy with other instances, the process of normal septum-formation in this plant, which, on account of peculiar complications, cannot generally be recognized with the same distinctness.

[To be continued.]

XLI.—*Notice of the Capture of Mithras paradoxus in England.*
By JOHN BLACKWALL, F.L.S.

IN the 'Annals and Magazine of Natural History' (ser. 3. vol. ix. p. 375), I have stated my belief that, on a careful inspection of *Mithras paradoxus*, it would be found to be provided with four pairs of spinners, and a calamistrum situated on the superior surface of the metatarsus of each posterior leg. An opportunity of establishing the accuracy of this opinion has recently been supplied by my friend Mr. R. H. Meade, who kindly forwarded to me a fine specimen of an adult female of this species that had been taken in the lake district of Cumberland, in the summer of 1863. The capture of this spider, which is now first recorded as indigenous to Britain, is a circumstance of peculiar interest; for, having placed beyond all doubt the fact that it possesses eight spinners and calamistra, every difficulty that has hitherto been experienced relative to assigning it an appropriate position in the systematic arrangement of the *Araneidea* is thereby removed. By its well-marked organic characters, it is

evident that *Mithras paradoxus*, together with its congeners *M. flavidus* and *M. dubius*, should occupy a place in the family *Ciniflonidae*, immediately after the genus *Veleda*.

The foregoing discovery necessitates a modification, as subjoined, of the characteristics of the

Genus MITHRAS.

Eyes eight, unequal in size, and disposed on the sides and anterior part of the cephalothorax in two transverse, curved rows; those of the posterior row, which is much the longer, and has its convexity directed forwards, are larger than those of the anterior row, the lateral eyes, which are seated on bold conical tubercles, being rather the largest; the eyes of the anterior row, whose convexity is directed upwards, are situated above the prominent frontal margin; the two intermediate ones are placed near to each other on a minute tubercle, and the lateral ones are not very conspicuous, being the smallest and lightest-coloured of the eight; the lateral eyes of both rows are separated by a wide interval.

Maxilla short, straight, powerful, and greatly enlarged at the extremity.

Lip triangular or somewhat oval.

Legs robust, of variable relative length in different species, each metatarsus of the posterior pair having a calamistrum on its superior surface.

Spinners eight; those of the inferior pair, which are the shortest, consist of a single joint each, and are united throughout their entire length.

BIBLIOGRAPHICAL NOTICE.

An Elementary Text-book of the Microscope; including a description of the Methods of preparing and mounting Objects, &c. By J. W. GRIFFITH, M.D., F.L.S. 12mo. Van Voorst, London, 1864.

NOTWITHSTANDING the numerous books of various kinds which have been published as guides in the employment of the microscope, Dr. Griffith appears to us to have justly come to the conclusion that there was room for one more; and the mode of treatment which he has adopted in the little work now before us places it, in some respects at least, not only apart from, but in a superior position to most of its predecessors and competitors. It is, in fact, rather as an elementary course of microscopic research than as a 'Text-book of the Microscope' that we welcome its appearance, by far the greater portion of its pages being devoted to the description of the most characteristic objects for microscopic examination derived from the animal and vegetable kingdoms. By a judicious arrangement of